

ASCL5 (D-16): sc-245005

BACKGROUND

Members of the myogenic determination family are basic helix-loop-helix (bHLH) proteins that can be separated into two classes, both of which work together to activate DNA transcription. Class A proteins include the ubiquitously expressed E-box binding factors, namely E2A, ITF-2 and HEB, while class B proteins, such as MyoD, myogenin and Neuro D (β 2), are transiently expressed and exhibit a much more limited tissue distribution. Working in opposition to these positively acting factors are a specialized group of bHLH transcription factors that functions as dominant negative regulators and are involved in cell lineage determination and differentiation. ASCL5 (achaete-scute homolog 5), also known as hASH5 or BHLHA47 (class A basic helix-loop-helix protein 47), is a 278 amino acid protein that localizes to nucleus and contains one bHLH domain. ASCL5 is widely expressed, with higher expression in lung, kidney, spleen and skeletal muscle. The gene that encodes ASCL5 maps to human chromosome 1q32.1.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ASCL5 (human) mapping to 1q32.1.

SOURCE

ASCL5 (D-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of ASCL5 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-245005 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-245005 X, 200 μ g/0.1 ml.

APPLICATIONS

ASCL5 (D-16) is recommended for detection of ASCL5 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other ASCL family members.

Suitable for use as control antibody for ASCL5 siRNA (h): sc-88312, ASCL5 shRNA Plasmid (h): sc-88312-SH and ASCL5 shRNA (h) Lentiviral Particles: sc-88312-V.

ASCL5 (D-16) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of ASCL5: 29 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.